

# **EXHIBIT B**

E-136

SuzyQ.txt

Rutgers University Environmental Planner  
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Farm Name: Suzy Q Farms

Location: Cream Ridge

Type Of Farm: Mixed Livestock

Address: 27 Hopkins Lane

Address Line 2: Cream Ridge, NJ

ZIP: 08514

Emergency Response:

Please enter the phone number of your county health department: 732-341-9700

Total Animal Units: 84.91 units

Specify Acreage: 249

Animal Density: 0.34 Units/Acre

Whenever Animal Density exceeds 1.0 Units/Acre, this Animal Waste Management Plan (AWMP) must be reviewed by a conservation professional to ensure that it meets the standards of the New Jersey Field Office Technical Guide and the New Jersey Best Management Practices Manual. To find a conservation professional near you please contact your local County Extension Office. You can find your local office by going to the following website: <http://njaes.rutgers.edu/county/>. A conservation professional should review this document and sign for approval.

\_\_\_\_\_  
Print Name of Conservation Professional

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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Total Manure Production: 2678567.1 lbs/year

Total N Production: 11622.54 lbs/year (8.67 lbs/ton)

Total P2O5 Production: 5719.03 lbs/year (4.27 lbs/ton)

Total K2O Production: 9204.2 lbs/year (6.87 lbs/ton)

Animal Units

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Beef:

Calves:

Animal Units: 10

Manure Production per Day: 1062 lbs / 84.96 DM lbs / 16.8 ft<sup>3</sup> / 125.8 gallons

Manure Production per Year: 387630 lbs / 31010.4 DM lbs / 6132 ft<sup>3</sup> / 45917 gallons

Nutrient Production per Day: 4.5 N / 2 P / 3.5 K

Nutrient Production per Year: 1642.5 N / 730 P / 1277.5 K

Beef Cattle (Mature):

Animal Units: 60

Manure Production per Day: 5520 lbs / 662.4 DM lbs / 87.6 ft<sup>3</sup> / 654.6 gallons

Manure Production per Year: 2014800 lbs / 241776 DM lbs / 31974 ft<sup>3</sup> / 238929 gallons

Nutrient Production per Day: 21 N / 10.8 P / 17.4 K

Nutrient Production per Year: 7665 N / 3942 P / 6351 K

Beef Cattle (Other):

Animal Units: 3.6

Manure Production per Day: 226.8 lbs / 27.21 DM lbs / 3.6 ft<sup>3</sup> / 27 gallons

Manure Production per Year: 82782 lbs / 9933.84 DM lbs / 1314 ft<sup>3</sup> / 9855 gallons

Nutrient Production per Day: 1.11 N / 0.68 P / 0.93 K

Nutrient Production per Year: 407.34 N / 249.66 P / 341.64 K

Pigs:

Finishing:

Animal Units: 4.5

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Manure Production per Day: 221.85 lbs / 24.40 DM lbs / 3.6 ft<sup>3</sup> / 26.68 gallons

Manure Production per Year: 80975.25 lbs / 8907.27 DM lbs / 1314 ft<sup>3</sup> / 9740.02 gallons

Nutrient Production per Day: 2.7 N / 0.9 P / 1.21 K

Nutrient Production per Year: 985.5 N / 328.5 P / 443.47 K

## Pigs (Other):

Animal Units: 1.2

Manure Production per Day: 56.16 lbs / 5.61 DM lbs / 0.88 ft<sup>3</sup> / 6.67 gallons

Manure Production per Year: 20498.4 lbs / 2049.84 DM lbs / 324.12 ft<sup>3</sup> / 2435.28 gallons

Nutrient Production per Day: 0.52 N / 0.36 P / 0.43 K

Nutrient Production per Year: 192.72 N / 131.4 P / 157.68 K

## Poultry:

## Chicken (Layer):

Animal Units: 0.18

Manure Production per Day: 9 lbs / 2.25 DM lbs / 0.12 ft<sup>3</sup> / 1.02 gallons

Manure Production per Year: 3285 lbs / 821.25 DM lbs / 44.01 ft<sup>3</sup> / 372.51 gallons

Nutrient Production per Day: 0.15 N / 0.04 P / 0.07 K

Nutrient Production per Year: 57.15 N / 17.73 P / 26.28 K

## Horses:

## Sedentary:

Animal Units: 1.5

Manure Production per Day: 81.6 lbs / 11.42 DM lbs / 1.32 ft<sup>3</sup> / 9.84 gallons

Manure Production per Year: 29784 lbs / 4169.76 DM lbs / 481.8 ft<sup>3</sup> / 3591.6 gallons

Nutrient Production per Day: 0.27 N / 0.09 P / 0.09 K

Nutrient Production per Year: 98.55 N / 32.85 P / 32.85 K

## Other:

## Sheep (Growing):

Animal Units: 0.75

Manure Production per Day: 30.75 lbs / 7.68 DM lbs / 0.45 ft<sup>3</sup> / 3.75 gallons

Manure Production per Year: 11223.75 lbs / 2805.93 DM lbs / 164.25 ft<sup>3</sup> / 1368.75 gallons



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gallons

Nutrient Production per Day: 0.3 N / 0.15 P / 0.3 K

Nutrient Production per Year: 109.5 N / 54.75 P / 109.5 K

Sheep (Adult):

Animal Units: 2.5

Manure Production per Day: 102.5 lbs / 25.62 DM lbs / 1.5 ft3 / 12.5 gallons

Manure Production per Year: 37412.5 lbs / 9353.12 DM lbs / 547.5 ft3 / 4562.5

gallons

Nutrient Production per Day: 1 N / 0.5 P / 1 K

Nutrient Production per Year: 365 N / 182.5 P / 365 K

Goats (Growing):

Animal Units: 0.18

Manure Production per Day: 7.38 lbs / 1.84 DM lbs / 0.10 ft3 / 0.9 gallons

Manure Production per Year: 2693.7 lbs / 673.42 DM lbs / 39.42 ft3 / 328.5

gallons

Nutrient Production per Day: 0.07 N / 0.03 P / 0.07 K

Nutrient Production per Year: 26.28 N / 13.14 P / 26.28 K

Goats (Adult):

Animal Units: 0.5

Manure Production per Day: 20.5 lbs / 5.12 DM lbs / 0.3 ft3 / 2.5 gallons

Manure Production per Year: 7482.5 lbs / 1870.62 DM lbs / 109.5 ft3 / 912.5

gallons

Nutrient Production per Day: 0.2 N / 0.1 P / 0.2 K

Nutrient Production per Year: 73 N / 36.5 P / 73 K

Bedding:

Total Bedding Production Per Year: 520000 lbs/year

How many animals do you house indoors?

Answer: 50

How many hours/day do your animals spend inside during the winter (Dec-Feb)?

Answer: 16

During the rest of the year?

Answer: 8

What type of bedding do you use?

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Answer:  
Woody Chips

How often do you add bedding/clean out stalls?

Answer: Twice per week

How much bedding (in lbs) do you add each time you clean stalls?

Answer: 100

Manure Storage:

What is the distance to the nearest open water or wetlands?

Answer: > 250 feet

What is the slope?: Slight (<2%)

Does it have an impermeable base?

Answer: Yes

Do you cover it?

Answer: No

Is it protected from storm water or a lot of runoff?

Answer: Yes

How many days does manure remain on the storage pile before removal?

Answer: 3

Describe your manure storage.

Answer: 20 x 40 concrete bin

How big (in sq. feet) is your manure storage?

Answer: 800

Describe erosion control measures around your manure storage area, such as vegetative filters or buffers designed to reduce the amount of runoff reaching any open bodies of water.

Answer: storage is concrete and 3 sided

If you compost, how often do you turn your compost?

Answer: 90 days

Add water regularly: No

Add straw, shavings, or another wood product: Yes

Add vegetative materials such as food waste (no meat): Yes

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Other: Yes

Distance of manure storage from property line: >250 ft

Distance of manure storage to nearest resident: >250 ft

Manure Disposal:

Do you dispose of manure off-farm?

Answer: Yes

What percentage of your manure is disposed off-farm?

Answer: 100

Describe your disposal plan.

Answer: Other

Field Report

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Environmental Advisories

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These environmental advisories were added because of your answers to some of the questions in the report. These advisories point out concerns that you need to be aware of. It is not necessary that you respond in any way to most of the advisories in this report.

However, the questions marked with Required following the question must be responded to as part of your report. These questions are related to requirements in the Animal Waste Rule that requires you to have an Animal Waste Management Plan. Please also consider the questions listed under Field report, one of those could be required as well.

You must respond to these by telling how you will solve any problems on your farm related to that question.

What is the distance to the nearest water body?:  
Your answer indicates that the nearest body of water is within 100 feet of your livestock. Having a greater distance to water will help protect stream banks, wetlands and riparian zones from adverse impacts from livestock trampling and waste contamination and should therefore be considered in your grazing management practices.



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Estimated 1.5x Manure Spreading Rate: 31.39 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 50-99 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: No

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

What is the distance to the nearest water body?:

Your answer indicates that there is a water body within a 100 feet of this field. To prevent future erosion problems, grassed buffers should be considered to help trap sediment from washing away and to help protect the water bank.

### Field 2 - 0-5% of total ###

Risk Factor: 9 - Medium

Description:

Baby Lambo Field, South Field, North Field, Lazy Angus Field

Crop Type: Sudax

Acreage: 13

Manure Analysis:



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Test Date: Jan/2016

Manure Test Values: 8.7 N / 4.3 P2O5 / 6.9 K2O

How much manure will be applied?: none

If a pasture or exercise lot, do you also spread manure?:

## Soil Analysis:

Test Date: 2016

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 3 (T)

Estimated Manure Spreading Rate: 4.88 (T)/acre

Estimated 1.5x Manure Spreading Rate: 7.32 (T)/acre

## Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 50-99 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: No

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

## Relative Risk:

What is the distance to the nearest water body?:

Your answer indicates that there is a water body within a 100 feet of this field. To prevent future erosion problems, grassed buffers should be considered to help trap sediment from washing away and to help protect the water bank.

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## ### Field 3 - &gt;50% of total ###

Risk Factor: 9 - Medium

Description:

Todd Field, Guam Field

Crop Type: Corn for Grain

Acreage: 185

## Manure Analysis:

Test Date: Jan/2016

Manure Test Values: 8.7 N / 4.3 P205 / 6.9 K20

How much manure will be applied?: 6 truck loads

If a pasture or exercise lot, do you also spread manure?:

## Soil Analysis:

Test Date: 2016

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 200 (bu)

Estimated Manure Spreading Rate: 18.60 (bu)/acre

Estimated 1.5x Manure Spreading Rate: 27.90 (bu)/acre

## Erosion Control:

What is the slope?: Slight (&lt;2%)

What is the distance to the nearest water body?: 50-99 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: No

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

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Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

What is the distance to the nearest water body?:

Your answer indicates that there is a water body within a 100 feet of this field. To prevent future erosion problems, grassed buffers should be considered to help trap sediment from washing away and to help protect the water bank.

#### Environmental Advisories

These environmental advisories were added because of your answers to some of the questions in the report. These advisories point out concerns that you need to be aware of. It is not necessary that you respond in any way to most of the advisories in this report.

However, the questions marked with Required following the question must be responded to as part of your report. These questions are related to requirements in the Animal Waste Rule that requires you to have an Animal Waste Management Plan. Please also consider the questions listed under Field report, one of those could be required as well.

You must respond to these by telling how you will solve any problems on your farm related to that question.

What is the distance to the nearest water body?:

Your answer indicates that the nearest body of water is within 100 feet of your livestock. Having a greater distance to water will help protect stream banks, wetlands and riparian zones from adverse impacts from livestock trampling and waste contamination and should therefore be considered in your grazing management practices.

Do your animals have access to streams, lakes or other open waters on your farm?(required):

Your yes answer indicates that your animals do have access to streams, lakes, or other open waters on your farm. Strategies such as streambank buffers and fencing should be considered to keep animals from these sensitive water sources to prevent



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wastes from entering water bodies, as well as preventing stream bank degradation, compaction of soils and loss of vegetation in these areas.

Fencing is being considered along with an alternate water source.

Are streams, lakes, and other open waters essential on your farm for livestock water consumption?(required):

Your yes answer indicates that streams, lakes, and other open waters are essential on your farm for livestock water consumption; access to abundant supplies of cool, fresh water is essential for grazing animals. However, having access may increase the risk of water contamination from animal wastes and pathogens. Use of fences, crossing, and limited access points can help to control risks that might occur. Other fresh water strategies, such as water wells, should be considered as a new water supply.

Currently, the stream is the only water source for the animals. An alternate water source is being considered.

Are manures and other organic wastes tested and credited in nutrient budgeting?:

Your no answer indicates that manures and other organic wastes are not tested and credited in nutrient budgeting. Testing of manures and other organic wastes is essential to avoid the application of excess nutrients to your crops. Nutrient budgeting accounts for the contributions of all sources of nutrients, so that additional commercial fertilizers and/or animal manures are only applied to make up a lack of nutrients.

Do you monitor the feed intake of your animals to prevent overconsumption and minimize waste?:

Your no answer indicates that you do not monitor the feed intake of your animals to prevent over consumption and minimize waste. It is important to monitor feed intake to ensure animals do not run into complications involved with over consumption and to ensure that their feed intake is equal to their waste production.



E26-16

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## Rutgers University Environmental Planner

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Farm Name: Suzie Q Farm

Location: Plumsted Township

Type Of Farm: Mixed

Address: 27 Hopkins Lane

Address Line 2: Plumstead, NJ

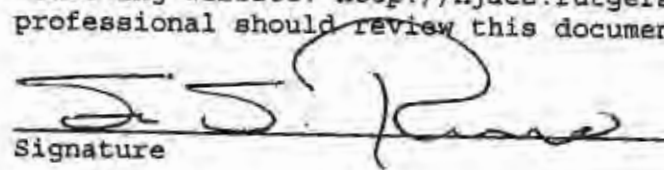
ZIP: 08514

## Emergency Response:

Enter the phone number of your county health department: (732)341-9700

Total Animal Units: ~~30.87~~ <sup>180</sup> unitsSpecify Acreage: ~~25~~ <sup>327</sup>Animal Density: ~~0.95~~ Units/Acre

Whenever Animal Density exceeds 1.0 Units/Acre, this Animal Waste Management Plan (AWMP) must be reviewed by a conservation professional to ensure that it meets the standards of the New Jersey Field Office Technical Guide and the New Jersey Best Management Practices Manual. To find a conservation professional near you please contact your local County Extension Office. You can find your local office by going to the following website: <http://njaes.rutgers.edu/county/>. A conservation professional should review this document and sign for approval.

  
 Signature

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 Updated

Total Manure Production: <sup>5173646.00</sup> 2586823.98 lbs/year; <sup>2586</sup> 1293 tons <sup>103 years</sup>  
 Total N Production: <sup>16.60</sup> 10726.98 lbs/year (8.29 lbs/ton)  
 Total P2O5 Production: <sup>8.58</sup> 5561.32 lbs/year (4.29 lbs/ton)  
 Total K2O Production: <sup>13.62</sup> 8812.37 lbs/year (6.81 lbs/ton)

x2

# Animal Units

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## Beef:

### Calves:

- Animal Units: 0.62
- Manure Production per Day: 65.84 lbs / 5.26 DM lbs / 1.04 ft3 / 7.79 gallons
- Manure Production per Year: 24033.06 lbs / 1922.64 DM lbs / 380.18 ft3 / 2846.85 gallons
- Nutrient Production per Day: 0.27 N / 0.12 P / 0.21 K
- Nutrient Production per Year: 101.83 N / 45.26 P / 79.20 K

### Beef Cattle (Mature):

- Animal Units: 65
- Manure Production per Day: 5980 lbs / 717.6 DM lbs / 94.9 ft3 / 709.15 gallons
- Manure Production per Year: 2182700 lbs / 261924 DM lbs / 34638.5 ft3 / 258839.75 gallons
- Nutrient Production per Day: 22.75 N / 11.7 P / 18.85 K
- Nutrient Production per Year: 8303.75 N / 4270.5 P / 6880.25 K

### Beef Cattle (Other):

- Animal Units: 5.5
- Manure Production per Day: 346.5 lbs / 41.58 DM lbs / 5.5 ft3 / 41.25 gallons
- Manure Production per Year: 126472.5 lbs / 15176.7 DM lbs / 2007.5 ft3 / 15056.25 gallons
- Nutrient Production per Day: 1.70 N / 1.04 P / 1.43 K
- Nutrient Production per Year: 622.32 N / 381.42 P / 521.95 K

## Pigs:

### Finishing:

- Animal Units: 0.9
- Manure Production per Day: 44.37 lbs / 4.88 DM lbs / 0.72 ft3 / 5.33 gallons
- Manure Production per Year: 16195.05 lbs / 1781.45 DM lbs / 262.8 ft3 / 1948.00 gallons
- Nutrient Production per Day: 0.54 N / 0.18 P / 0.24 K
- Nutrient Production per Year: 197.1 N / 65.7 P / 88.69 K

x2

Gestating:

- Animal Units: 10
- Manure Production per Day: 227.5 lbs / 20.47 DM lbs / 3.8 ft<sup>3</sup> / 27.5 gallons
- Manure Production per Year: 83037.5 lbs / 7473.37 DM lbs / 1387 ft<sup>3</sup> / 10037.5 gallons
- Nutrient Production per Day: 1.5 N / 1 P / 1.3 K
- Nutrient Production per Year: 547.5 N / 365 P / 474.5 K

## Horses:

Sedentary:

- Animal Units: 4
- Manure Production per Day: 217.6 lbs / 30.46 DM lbs / 3.52 ft<sup>3</sup> / 26.24 gallons
- Manure Production per Year: 79424 lbs / 11119.36 DM lbs / 1284.8 ft<sup>3</sup> / 9577.6 gallons
- Nutrient Production per Day: 0.72 N / 0.24 P / 0.24 K
- Nutrient Production per Year: 262.8 N / 87.6 P / 87.6 K

Ponies And Miniatures:

- Animal Units: 0.45
- Manure Production per Day: 24.97 lbs / 3.49 DM lbs / 0.40 ft<sup>3</sup> / 3.01 gallons
- Manure Production per Year: 9115.87 lbs / 1276.22 DM lbs / 147.82 ft<sup>3</sup> / 1100.47 gallons
- Nutrient Production per Day: 0.13 N / 0.06 P / 0.10 K
- Nutrient Production per Year: 49.27 N / 24.63 P / 37.77 K

## Sheep:

Sheep (Adult):

- Animal Units: 3.9
- Manure Production per Day: 159.9 lbs / 39.97 DM lbs / 2.34 ft<sup>3</sup> / 19.5 gallons
- Manure Production per Year: 58363.5 lbs / 14590.87 DM lbs / 854.1 ft<sup>3</sup> / 7117.5 gallons
- Nutrient Production per Day: 1.56 N / 0.78 P / 1.56 K
- Nutrient Production per Year: 569.4 N / 284.7 P / 569.4 K



## Goats:

Goats (Adult):

- Animal Units: 0.5
- Manure Production per Day: 20.5 lbs / 5.12 DM lbs / 0.3 ft<sup>3</sup> / 2.5 gallons
- Manure Production per Year: 7482.5 lbs / 1870.62 DM lbs / 109.5 ft<sup>3</sup> / 912.5 gallons
- Nutrient Production per Day: 0.2 N / 0.1 P / 0.2 K
- Nutrient Production per Year: 73 N / 36.5 P / 73 K

## Bedding:

- Total Bedding Use Per Year: 100 tons/year
- How many animals do you house indoors?  
Answer: 20
- How many hours/day do your animals spend inside during the winter (Dec-Feb)?  
Answer: 45
- During the rest of the year?  
Answer: 10
- What type of bedding do you use?  
Answer: Woody Chips - *grass clippings, leaves*
- How often do you add bedding/clean out stalls?  
Answer: Weekly
- How much bedding (in lbs) do you add each time you clean stalls?  
Answer: 15

## Manure Storage:

N/A

- What is the distance to the nearest open water or wetlands?  
Answer: > 250 feet
- What is the slope?: Slight (<2%)
- Does it have an impermeable base?  
Answer: No
- Do you cover it?  
Answer: No
- Is it protected from storm water or a lot of runoff?  
Answer: Yes



- How many days does manure remain on the storage pile before removal?  
Answer: 90
- Describe your manure storage.  
Answer: Animals bedded heavily and manure removed from animal lots regularly. Manure removed and deposited on fields every 7 days. Manure storage at least 250 feet from water.
- How big (in sq. feet) is your manure storage? *N/A*  
Answer: 80000 sq. feet planned for a composting area *N/A*
- Describe erosion control measures around your manure storage area, such as vegetative filters or buffers designed to reduce the amount of runoff reaching any open bodies of water.
- Answer: All lot manure goes into a storage in Field 5 and is distributed elsewhere during the year.
- If you compost, how often do you turn your compost?  
Answer: 30 days, currently initiating a composting program
- Add water regularly: No
- Add straw, shavings, or another wood product: ~~Yes~~ NO
- Add vegetative materials such as food waste (no meat): No
- Other: No

*N/A* Distance of manure storage from property line: >250 ft

- Distance of manure storage to nearest resident: >250 ft *N/A*

#### Manure Disposal:

- Do you dispose of manure off-farm? *yes*  
Answer: ~~Not presently~~, hope to market finished compost in the future
- What percentage of your manure is disposed off-farm? *collected*  
Answer: ~~70%~~ 100%
- Describe your disposal plan.  
Answer: ~~Nothing disposed off site~~

① I Deliver it to several off site locations  
② ~~only~~ of my Top 50.1 Del OFFSITE is MANURE  
percentage

Field Report  
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## ### Field 1 - 11-25% of total manure spread ###

Risk Factor: 8 - Medium

Description:

Field 1 - Winter Rye and Corn Silage Next Year

Crop Type: Rye Straw/Corn Silage

Acreage: 10

## Manure Analysis:

Test Date: Jan/2013

Manure Test Values: 8.3 N / 4.3 P2O5 / 6.8 K2O

How much manure will be applied?: ~~0.50~~ Loads

If a pasture or exercise lot, do you also spread manure?:

## Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 15 (T)

~~Estimated Manure Spreading Rate: 17.44 (T)/acre~~ NA~~Estimated 1.5x Manure Spreading Rate: 26.16 (T)/acre~~ NA

## Erosion Control:

What is the slope?: Slight (&lt;2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: No

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: Yes
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): No
- Pastures are dragged to spread waste: No

• Other: No

Do you spread manure on frozen ground during winter months on this field?: ~~Yes~~ **No**

Describe your manure spreading techniques on this field.: Spread and incorporate manure into the soil after 3 months

Relative Risk:

Do you spread manure on frozen ground during winter months on this field? Do not winter spread.

A yes answer indicates that you spread manure on this field when the ground is frozen during winter months. This is a potential water quality risk. A heavy rainfall event could cause surface applied manure to run off into nearby open waters. Consider applying in the fall or spring and follow with quick soil incorporation (disking, cultivating, plowing, etc.). You can also stockpile manure during winter months in a designated storage area. The use of cover crops can help to reduce erosion risk during winter months.

### ### Field 2 - 26-50% of total manure spread ###

Risk Factor: 7 - Medium

Description:

Field 2 - Corn Silage

Crop Type: Corn Silage

Acreage: 25

Manure Analysis:

Test Date: Jan/2013

Manure Test Values: 8.3 N / 4.3 P2O5 / 6.8 K2O

How much manure will be applied?: ~~125 Loads~~ **0**

If a pasture or exercise lot, do you also spread manure?: No

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 15 (T)

~~NA Estimated Manure Spreading Rate: 17.44 (T)/acre~~

~~Estimated 1.5x Manure Spreading Rate: 26.16 (T)/acre~~

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet



Do you drag it to break up manure piles and make them more available?:

Answer: Yes

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: No
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): Yes
- Pastures are dragged to spread waste: No
- Other: No

Do you spread manure on frozen ground during winter months on this field?: ~~Yes~~

Describe your manure spreading techniques on this field.: Spread and incorporate manure into the soil after 3 months

#### Relative Risk:

Do you spread manure on frozen ground during winter months on this field? Do not winter spread.

A yes answer indicates that you spread manure on this field when the ground is frozen during winter months. This is a potential water quality risk. A heavy rainfall event could cause surface applied manure to run off into nearby open waters. Consider applying in the fall or spring and follow with quick soil incorporation (disking, cultivating, plowing, etc.). You can also stockpile manure during winter months in a designated storage area. The use of cover crops can help to reduce erosion risk during winter months.

### ### Field 3 - 11-25% of total manure spread ###

Risk Factor: 7 - Medium

Description:

Field 3 - Corn Silage

Crop Type: Corn Silage

Acreage: 7

Manure Analysis:

Test Date: Jan/2013

Manure Test Values: 8.3 N / 4.3 P2O5 / 6.8 K2O

How much manure will be applied?: ~~40 Loads~~ 0



If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 15 (T)

~~Estimated Manure Spreading Rate: 17.44 (T)/acre~~

~~Estimated 1.5x Manure Spreading Rate: 26.16 (T)/acre~~

N/A

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: ~~no~~

If this field is in permanent pasture, is it harvested for hay?:

Answer:

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: No
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): Yes
- Pastures are dragged to spread waste: No
- Other: No

Do you spread manure on frozen ground during winter months on this field?: ~~Yes~~

Describe your manure spreading techniques on this field.: Spread and incorporate manure into the soil after 3 months

Relative Risk:

Do you spread manure on frozen ground during winter months on this field? Do not winter spread.

A yes answer indicates that you spread manure on this field when the ground is frozen during winter months. This is a potential water quality risk. A heavy rainfall event could cause surface applied manure to run off into nearby open waters. Consider applying in the fall or spring and follow with quick soil incorporation (disking, cultivating, plowing, etc.) You can also stockpile manure during winter months in a

designated storage area. The use of cover crops can help to reduce erosion risk during winter months.

### ### Field 4 - 11-25% of total manure spread ###

Risk Factor: 8 - Medium

Description:

Field 4 - Rye/Corn Silage

Crop Type: Rye and Corn Silage

Acreage: 7

Manure Analysis:

Test Date: Jan/2004

~~Manure Test Values: 8.3 N / 4.3 P205 / 5.8 K2O~~

~~How much manure will be applied?: 40 Loads~~

~~If a pasture or exercise lot, do you also spread manure?:~~

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 15 (T)

~~Estimated Manure Spreading Rate: 17.44 (T)/acre~~ *N/A*

~~Estimated 1.5x Manure Spreading Rate: 26.16 (T)/acre~~

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: ~~NO~~

If this field is in permanent pasture, is it harvested for hay?:

Answer:

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: Yes
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): No

- Pastures are dragged to spread waste: No
- Other: No

~~Do you spread manure on frozen ground during winter months on this field?: Yes~~

~~Describe your manure spreading techniques on this field.: Spread and incorporate manure into the soil after 3 months~~

Relative Risk:

Do you spread manure on frozen ground during winter months on this field? Do not winter spread.

A yes answer indicates that you spread manure on this field when the ground is frozen during winter months. This is a potential water quality risk. A heavy rainfall event could cause surface applied manure to run off into nearby open waters. Consider applying in the fall or spring and follow with quick soil incorporation (disking, cultivating, plowing, etc.). You can also stockpile manure during winter months in a designated storage area. The use of cover crops can help to reduce erosion risk during winter months.

### ### Field 5 - 0%

Risk Factor: 7 - Medium

Description:

Field 5 - Dry Lot Nothing Currently Planted

Crop Type: Nothing - Manure storage, future composting area

Acreage: 4

Manure Analysis:

Test Date: Jan/2013

~~Manure Test Values: 8.3 N / 4.3 P205 / 6.8 K20~~

~~How much manure will be applied?: None~~

~~If a pasture or exercise lot, do you also spread manure?:~~

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 20 (T)

~~Estimated Manure Spreading Rate: 23.25 (T)/acre~~

~~Estimated 1.5x Manure Spreading Rate: 34.88 (T)/acre~~

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet



Do you drag it to break up manure piles and make them more available?:

Answer: ~~NO~~

If this field is in permanent pasture, is it harvested for hay?:

Answer: ~~NO~~

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: No
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): No
- Pastures are dragged to spread waste: No
- Other: No

Do you spread manure on frozen ground during winter months on this field?: No

~~Describe your manure spreading techniques on this field.: No spreading~~

Relative Risk:

None - No Spreading

### ### Field 6 - 0-5% of total manure spread ###

Risk Factor: 7 - Medium

Description:

Field 6 - Corn Silage

Crop Type: Corn Silage

Acreage: 3

Manure Analysis:

Test Date: Jan/2013

~~Manure Test Values: 8.3 N / 4.3 P205 / 6.8 K2O~~

~~How much manure will be applied?: 20 Loads~~ ~~N/A~~

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0



K: 0

Crop Yield per Acre: 15 (T)

~~Estimated Manure Spreading Rate: 17.44 (T)/acre~~

~~Estimated 1.5x Manure Spreading Rate: 26.16 (T)/acre~~

#### Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: ☒ No

If this field is in permanent pasture, is it harvested for hay?:

Answer: ☒ No

- Permanent hayfield or pasture: No
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: No
- Grassed Waterways: No
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): Yes
- Pastures are dragged to spread waste: No
- Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: Spread and incorporate manure into the soil after 3 months

#### Relative Risk:

Do you spread manure on frozen ground during winter months on this field? Do not winter spread.

A yes answer indicates that you spread manure on this field when the ground is frozen during winter months. This is a potential water quality risk. A heavy rainfall event could cause surface applied manure to run off into nearby open waters. Consider applying in the fall or spring and follow with quick soil incorporation (disking, cultivating, plowing, etc.). You can also stockpile manure during winter months in a designated storage area. The use of cover crops can help to reduce erosion risk during winter months.

#### ### Field 7 - 0%

Risk Factor: 5 - Low

Description:

Field 7 - Pasture

Crop Type: Cool Season Grasses

Acreage: 8

Manure Analysis:

Test Date: Jan/2013

Manure Test Values: 8.3 N / 4.3 P2O5 / 6.8 K2O

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?: No

Soil Analysis:

Test Date: Not Required

pH:

Organic Matter:

P: 0

K: 0

Crop Yield per Acre: 2 (T)

~~Estimated Manure Spreading Rate: 6.97 (T)/acre~~

Estimated 1.5x Manure Spreading Rate: 10.46 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: No

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

- Permanent hayfield or pasture: Yes
- Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes
- Terraces to limit erosion: No
- Strip cropping or contour planting of fields: No
- Use of winter cover crops to prevent erosion: No
- Grassed Waterways: Yes
- Crop rotation with 3 or more years of hay: No
- Residue management (no-till or minimum-till): No
- Pastures are dragged to spread waste: No
- Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No Spreading

Relative Risk:

June 11, 2019 updated

## Rutgers University Environmental Planner

Farm Name: Suzie Q Farm

Location: Plumbstead Township

Type Of Farm: Mixed

Address: 27 Hopkins Lane

Address Line 2: Plumbstead NJ

ZIP: 08514

## Emergency Response:

Please enter the phone number of your county health department:

Total Animal Units: 181.22 units

Specify Acreage: 327

Animal Density: 0.55 Units/Acre

Whenever Animal Density exceeds 1.0 Units/Acre, this Animal Waste Management Plan (AWMP) must be reviewed by a conservation professional to ensure that it meets the standards of the New Jersey Field Office Technical Guide and the New Jersey Best Management Practices Manual. To find a conservation professional near you please contact your local County Extension Office. You can find your local office by going to the following website: <http://njaes.rutgers.edu/county/>. A conservation professional should review this document and sign for approval.

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Print Name of Conservation Professional

---

Signature

---

Date

Total Manure Production: 5330693.6 lbs/year



Total N Production: 23307 lbs/year (8.74 lbs/ton)

Total P2O5 Production: 12696.99 lbs/year (4.76 lbs/ton)

Total K2O Production: 19165.6 lbs/year (7.19 lbs/ton)

#### Animal Units

#### Beef:

##### Calves:

Animal Units: 17

Manure Production per Day: 1805.4 lbs / 144.43 DM lbs / 28.56 ft<sup>3</sup> / 213.86 gallons

Manure Production per Year: 658971 lbs / 52717.68 DM lbs / 10424.4 ft<sup>3</sup> / 78058.9 gallons

Nutrient Production per Day: 7.65 N / 3.4 P / 5.95 K

Nutrient Production per Year: 2792.25 N / 1241 P / 2171.75 K

##### Beef Cattle (Mature):

Animal Units: 103.05

Manure Production per Day: 9480.6 lbs / 1137.67 DM lbs / 150.45 ft<sup>3</sup> / 1124.27 gallons

Manure Production per Year: 3460419 lbs / 415250.28 DM lbs / 54915.34 ft<sup>3</sup> / 410360.55 gallons

Nutrient Production per Day: 36.06 N / 18.54 P / 29.88 K

Nutrient Production per Year: 13164.63 N / 6770.38 P / 10907.84 K

##### Beef Cattle (Other):

Animal Units: 36.9

Manure Production per Day: 2324.7 lbs / 278.96 DM lbs / 36.9 ft<sup>3</sup> / 276.75 gallons

Manure Production per Year: 848515.5 lbs / 101821.86 DM lbs / 13468.5 ft<sup>3</sup> / 101013.75 gallons

Nutrient Production per Day: 11.43 N / 7.01 P / 9.59 K

Nutrient Production per Year: 4175.23 N / 2559.01 P / 3501.81 K

#### Pigs:

##### Gestating:

Animal Units: 4.8

Manure Production per Day: 109.2 lbs / 9.82 DM lbs / 1.82 ft<sup>3</sup> / 13.2 gallons  
 Manure Production per Year: 39858 lbs / 3587.22 DM lbs / 665.76 ft<sup>3</sup> / 4818

gallons

Nutrient Production per Day: 0.72 N / 0.48 P / 0.62 K  
 Nutrient Production per Year: 262.8 N / 175.2 P / 227.76 K

#### Lactating:

Animal Units: 6.3  
 Manure Production per Day: 294.84 lbs / 29.48 DM lbs / 4.66 ft<sup>3</sup> / 35.02 gallons  
 Manure Production per Year: 107616.6 lbs / 10761.66 DM lbs / 1701.63 ft<sup>3</sup> /

12785.22 gallons

Nutrient Production per Day: 2.77 N / 1.89 P / 2.26 K  
 Nutrient Production per Year: 1011.78 N / 689.85 P / 827.82 K

#### Boars:

Animal Units: 1.2  
 Manure Production per Day: 24.6 lbs / 2.21 DM lbs / 0.39 ft<sup>3</sup> / 2.97 gallons  
 Manure Production per Year: 8979 lbs / 808.11 DM lbs / 144.54 ft<sup>3</sup> / 1086.24

gallons

Nutrient Production per Day: 0.18 N / 0.15 P / 0.15 K  
 Nutrient Production per Year: 65.7 N / 56.94 P / 56.94 K

#### Pigs (Other):

Animal Units: 10.4  
 Manure Production per Day: 486.72 lbs / 48.67 DM lbs / 7.69 ft<sup>3</sup> / 57.82 gallons  
 Manure Production per Year: 177652.8 lbs / 17765.28 DM lbs / 2809.04 ft<sup>3</sup> /

21105.76 gallons

Nutrient Production per Day: 4.57 N / 3.12 P / 3.74 K  
 Nutrient Production per Year: 1670.24 N / 1138.8 P / 1366.56 K

#### Poultry:

##### Other Fowl:

Animal Units: 0.09  
 Manure Production per Day: 4.5 lbs / 1.12 DM lbs / 0.06 ft<sup>3</sup> / 0.51 gallons  
 Manure Production per Year: 1642.5 lbs / 410.62 DM lbs / 22.00 ft<sup>3</sup> / 186.25

gallons

Nutrient Production per Day: 0.07 N / 0.02 P / 0.03 K  
 Nutrient Production per Year: 28.57 N / 8.86 P / 13.14 K

#### Horses:

Sedentary:

Animal Units: 1

Manure Production per Day: 54.4 lbs / 7.61 DM lbs / 0.88 ft<sup>3</sup> / 6.56 gallons

Manure Production per Year: 19856 lbs / 2779.84 DM lbs / 321.2 ft<sup>3</sup> / 2394.4 gallons

Nutrient Production per Day: 0.18 N / 0.06 P / 0.06 K

Nutrient Production per Year: 65.7 N / 21.9 P / 21.9 K

Other:

Goats (Adult):

Animal Units: 0.48

Manure Production per Day: 19.68 lbs / 4.92 DM lbs / 0.28 ft<sup>3</sup> / 2.4 gallons

Manure Production per Year: 7183.2 lbs / 1795.8 DM lbs / 105.12 ft<sup>3</sup> / 876 gallons

Nutrient Production per Day: 0.19 N / 0.09 P / 0.19 K

Nutrient Production per Year: 70.08 N / 35.04 P / 70.08 K

Bedding:

Total Bedding Production Per Year: 10920 lbs/year

How many animals do you house indoors?

Answer: 7

How many hours/day do your animals spend inside during the winter (Dec-Feb)?

Answer: 16

During the rest of the year?

Answer: 0

What type of bedding do you use?

Answer:

Woody Chips

Other

How often do you add bedding/clean out stalls?

Answer: Twice per week

How much bedding (in lbs) do you add each time you clean stalls?

Answer: 15

Manure Storage:

What is the distance to the nearest open water or wetlands?



Answer: > 250 feet

What is the slope?: Moderate (3-8%)

Does it have an impermeable base?

Answer: No

Do you cover it?

Answer: No

Is it protected from storm water or a lot of runoff?

Answer: Yes

How many days does manure remain on the storage pile before removal?

Answer: 0

Describe your manure storage.

Answer: storage is managed as compost mounds and area's.

When compost has aged enough product is screened and removed from the farm to landscapers

How big (in sq. feet) is your manure storage?

Answer: 80000

Describe erosion control measures around your manure storage area, such as vegetative filters or buffers designed to reduce the amount of runoff reaching any open bodies of water.

Answer: cpmopost area is protected by soil burms to prevent water flow away from area where it can not be buffered. Any water discharge is directed through filter area's and grass buffers.

If you compost, how often do you turn your compost?

Answer: 60 days

Add water regularly: No

Add straw, shavings, or another wood product: Yes

Add vegetative materials such as food waste (no meat): No

Other: No

Distance of manure storage from property line: 100-250 ft

Distance of manure storage to nearest resident: >250 ft

Manure Disposal:

Do you dispose of manure off-farm?

Answer: Yes

What percentage of your manure is disposed off-farm?

Answer: 95

Describe your disposal plan.

Answer: Picked up by landscaper, etc.

## Field Report

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### ### Field 1 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 1 crop field with limited graze of crop residual

Crop Type: Corn Silage and Winter Rye

Acreage: 10

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K2O

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2019

pH: 6.1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 20 (T)

Estimated Manure Spreading Rate: 20.83 (T)/acre

Estimated 1.5x Manure Spreading Rate: 31.25 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: Yes

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 2 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 2 Crop Production

Crop Type: Corn Silage, winter rye

Acreage: 25

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K20

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2019

pH: 6.3

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 20 (T)

Estimated Manure Spreading Rate: 20.83 (T)/acre

Estimated 1.5x Manure Spreading Rate: 31.25 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet



Do you drag it to break up manure piles and make them more available?:

Answer: Yes

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 3 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 3 crop production

Crop Type: Corn Silage, winter Rye

Acreage: 7

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K2O

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2004

pH: 6.2

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 20 (T)

Estimated Manure Spreading Rate: 20.83 (T)/acre  
 Estimated 1.5x Manure Spreading Rate: 31.25 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)  
 What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 4 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 4 crop production

Crop Type: Corn silage, Winter Rye

Acreage: 7

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K2O

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2019

pH: 6

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 20 (T)

Estimated Manure Spreading Rate: 20.83 (T)/acre

Estimated 1.5x Manure Spreading Rate: 31.25 (T)/acre

#### Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

#### Relative Risk:

None

#### ### Field 5 - 0-5% of total ###

Risk Factor: 7 - Medium

Description:

Field 5 Dry Lot

Crop Type: nothing some cover

Acreage: 4

Manure Analysis:



Test Date: Jan/2004

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K20

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?: No

#### Soil Analysis:

Test Date: 2004

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 1 (T)

Estimated Manure Spreading Rate: 2.08 (T)/acre

Estimated 1.5x Manure Spreading Rate: 3.12 (T)/acre

#### Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: Yes

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

Permanent hayfield or pasture: Yes

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: No

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: No

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): No

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

#### Relative Risk:

None

### Field 6 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 6 - Crop Production

Crop Type: Corn Silage, Winter Rye

Acreage: 3

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P2O5 / 7.2 K2O

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2019

pH: 6

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 20 (T)

Estimated Manure Spreading Rate: 20.83 (T)/acre

Estimated 1.5x Manure Spreading Rate: 31.25 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: Yes

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 7 - 0-5% of total ###

Risk Factor: 6 - Low

Description:

Field 7 - pasture

Crop Type: Pasture

Acreage: 8

Manure Analysis:

Test Date: Jan/2004

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K20

How much manure will be applied?: 0

If a pasture or exercise lot, do you also spread manure?: No

Soil Analysis:

Test Date: 2004

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 2 (T)

Estimated Manure Spreading Rate: 6.25 (T)/acre

Estimated 1.5x Manure Spreading Rate: 9.37 (T)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer: Yes

If this field is in permanent pasture, is it harvested for hay?:

Answer: No

Permanent hayfield or pasture: Yes

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: No

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: No

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): No



Pastures are dragged to spread waste: Yes

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 8 - 6-10% of total ###

Risk Factor: 6 - Low

Description:

Field 8 additional farm South Jersey raising corn for grain and soy beans

Crop Type: Grain Corn

Acreage: 122

Manure Analysis:

Test Date: May/2019

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K20

How much manure will be applied?: 3 tractor trailer loads

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2018

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 200 (bu)

Estimated Manure Spreading Rate: 16.66 (bu)/acre

Estimated 1.5x Manure Spreading Rate: 25 (bu)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff

into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: No

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

### Field 9 - 6-10% of total ###

Risk Factor: 6 - Low

Description:

Field 9 South Jersey crop production farm

Crop Type: Soybeans

Acreage: 144

Manure Analysis:

Test Date: Jan/2018

Manure Test Values: 8.7 N / 4.8 P205 / 7.2 K20

How much manure will be applied?: 3 tractor trailer loads

If a pasture or exercise lot, do you also spread manure?:

Soil Analysis:

Test Date: 2004

pH: 1

Organic Matter: 1

P: 0

K: 0

Crop Yield per Acre: 60 (bu)

Estimated Manure Spreading Rate: 12.5 (bu)/acre

Estimated 1.5x Manure Spreading Rate: 18.75 (bu)/acre

Erosion Control:

What is the slope?: Slight (<2%)

What is the distance to the nearest water body?: 100-250 feet

Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: No

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

#### Environmental Advisories

These environmental advisories were added because of your answers to some of the questions in the report. These advisories point out concerns that you need to be aware of. It is not necessary that you respond in any way to most of the advisories in this report.

However, the questions marked with Required following the question must be responded to as part of your report. These questions are related to requirements in the Animal Waste Rule that requires you to have an Animal Waste Management Plan. Please also consider the questions listed under Field report, one of those could be required as well.

You must respond to these by telling how you will solve any problems on your farm related to that question.

Does it have an impermeable base?:

Your no answer indicates that your manure storage does not have an impermeable base.

An impermeable base is important in manure storage so that nutrients do not leach into the soil and possibly contaminate ground water supplies. *Manure Stored As Compost*

Is all highly erodible land identified?:

Your no answer indicates that not all of your highly erodible land is identified.



Do you drag it to break up manure piles and make them more available?:

Answer:

If this field is in permanent pasture, is it harvested for hay?:

Answer:

Permanent hayfield or pasture: No

Grassed buffers or borders 20 feet or wider around the fields to prevent runoff into open water: Yes

Terraces to limit erosion: No

Strip cropping or contour planting of fields: No

Use of winter cover crops to prevent erosion: No

Grassed Waterways: No

Crop rotation with 3 or more years of hay: No

Residue management (no-till or minimum-till): Yes

Pastures are dragged to spread waste: No

Other: No

Do you spread manure on frozen ground during winter months on this field?: No

Describe your manure spreading techniques on this field.: No answer

Relative Risk:

None

#### Environmental Advisories

These environmental advisories were added because of your answers to some of the questions in the report. These advisories point out concerns that you need to be aware of. It is not necessary that you respond in any way to most of the advisories in this report.

However, the questions marked with Required following the question must be responded to as part of your report. These questions are related to requirements in the Animal Waste Rule that requires you to have an Animal Waste Management Plan. Please also consider the questions listed under Field report, one of those could be required as well.

You must respond to these by telling how you will solve any problems on your farm related to that question.

Does it have an impermeable base?:

Your no answer indicates that your manure storage does not have an impermeable base.

An impermeable base is important in manure storage so that nutrients do not leach into the soil and possibly contaminate ground water supplies. *Manure stored as compost*

Is all highly erodible land identified?:

Your no answer indicates that not all of your highly erodible land is identified.

It is very important that you are aware of the areas of your farm that are eroding or are likely to erode so that measures such as planting vegetation in these areas can be done to prevent any future erosion.

# **EXHIBIT C**



1002

**From:** "Howland, Sandra" <Sandra.Howland@ag.nj.gov>  
**Subject:** RE: Suzie Q Farm  
**Date:** June 29, 2018 3:30:41 PM EDT  
**To:** "Sam S Russo Inc." <Brianna.Russo@ymail.com>, "samsrussoinc@ymail.com" <samsrussoinc@ymail.com>  
**Cc:** "Steimle, Kelly" <Kelly.Steimle@ag.nj.gov>, "Purcell, Monique" <Monique.Purcell@ag.nj.gov>

Mr. Russo,

Thank you for your letter. Your organized and complete records made it easy to update your AWMP. The narrative descriptions you were able to provide describing each livestock area on your farm, and the Best Management Practices you are implementing at each location is a valuable document to include in your AWMP. As discussed, since your operation is continually changing, please keep the narrative descriptions up to date as part of your AWMP.

On another matter, you had called our office and spoke to Monique Purcell regarding receiving additional SSFW. Given the fact that SSFW determinations were reassigned to the Division of Agricultural and Natural Resources the day before your request, you were given verbal approval to accept 10 Tons of apples and oranges. Moving forward, all Departmental Approvals will be given in writing. You indicated that you would possibly be receiving up to 80 Tons of additional material to be frozen on your farm. You were to follow up with this office if you decided to do so. We didn't hear back from you, so we assume that you did not pick up additional material. Is that correct? Please advise.

Thank you,

Sandra Howland, Research Scientist  
Division of Agricultural & Natural Resources  
New Jersey Department of Agriculture  
Cell: 609-815-6159 | Office: 609-292-4576

**From:** Sam S Russo Inc. [mailto:Brianna.Russo@ymail.com]

**Sent:** Wednesday, June 27, 2018 9:47 AM